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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,396	07/31/2001	Raghunandan Sanjeev	TC00113	3425

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EXAMINER

CHEN, ALAN S

ART UNIT PAPER NUMBER

2182

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,396

Applicant(s)

SANJEEV ET AL.

Examiner

Alan S. Chen

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/08/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-36 have been considered but are moot in view of the new ground(s) of rejection.
2. In applicants response and amendment, the nodes and links are now specifically stated as being wireless.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No. 6,801,942 to Dietrich et al. (Dietrich) in view of Opening Bluetooth for Technical Tasks – Possibilities and Challenges for Automotive Applications (hereafter CAN-Bluetooth).

7. As per claims 1, 12, 21 and 32, Dietrich discloses a method (Fig. 2) of dynamically configuring access to services (data from the CAN node between a various remote communications node can be retrieved upon request by a remote device, Column 9, lines 40-67, services can include snapshots or memory dumps of segments of memory) between a remote communications node and one or more remote communication devices (Fig. 1, any of the CAN nodes are remote communications nodes relative to the wireless base station, element 210, a remote communications device; element 130 is also the remote communications device). It is important to note that Dietrich discloses the functional items within element 130 can be separate, e.g., not all on one substrate (Column 7, lines 3-10), comprising: determining if the remote communications node (Fig. 1, element 130 is the remote communications node, by definition, by communicating with the wireless device, element 210) is communicating with the distributed communications system (distributed system in the context of Dietrich is the system left of the gateway in Fig. 1, element 170, clearly shown by the distributed nodes, elements 110, 120, 160, etc); configuring the remote communications node as a primary gateway if communicating with the distributed communications system (Fig. 1, element 133 is the only, hence, primary gateway if communication occurs between element 133 and nodes not past element 170) and configuring the remote communications node as a secondary gateway if the remote communications node is

Art Unit: 2182

not communicating with the distributed communications system (the other communications nodes, right of the CAN/CAN gateway shown in Fig. 1, e.g., elements 100 and 102, is communicated via two gateways by the base station, Fig. 1, element 210. It is intrinsically that a message retrieved from element 180 must pass through gateway 170 first, now the primary gateway, and then through element 133, designated now as the secondary gateway, before being received by the base station, element 210); initializing the remote communications device (Fig. 2, element 310a, and Column 7, lines 42-61); negotiating for services between the remote communications node and a remote communications device (per claim 32, Dietrich discloses establishing communications requires negotiation using identifiers and comparison scheme for communications between the CAN nodes and a gateway device, Column 11, lines 1-27); and dynamically configuring the remote communications node and the remote communications device to optimally access services in a serial configuration (Fig. 2, shows the sequential, serial flow of the access between element 130, the remote communications node, and the other CAN nodes in Fig. 1), wherein the primary and secondary gateways swap roles depending on the directions the message/commands are directed (per claim 12, e.g., if base station sending message to CAN node 180, then element 133 is primary gateway while element 170 is the secondary gateway; it is intrinsic the intent of Dietrich is to implement this communication in the most efficient way possible).

Dietrich does not disclose expressly the CAN network being a wireless network, more specifically, the nodes and devices networked by CAN being wireless.

CAN-Bluetooth discloses nodes and devices of the CAN protocol bus being able to communicate between each other wirelessly instead of over wires (Figs. 7 and 8). Page 9+ of

Art Unit: 2182

CAN-Bluetooth, under the heading CAN/Bluetooth basics, establishes the ability that wired CAN can be made wireless.

Dietrich and CAN-Bluetooth are analogous art because they are from similar problem solving area of using the reliable CAN industrial bus protocol.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to utilize CAN as a wireless bus, e.g., use Bluetooth for wireless communication.

The suggestion/motivation for doing so would have been all the advantages disclosed by CAN-Bluetooth in Fig.1, such as lower costs, flexibility and reliability of implementing the CAN network.

Therefore, it would have been obvious to combine Dietrich with CAN-Bluetooth for the benefit of lower costs, flexibility and reliability of a wireless CAN bus.

8. As per claims 2-6, 13-15, 22-26 and 33-35, Dietrich combined with CAN-Bluetooth discloses claims 1, 12, 21 and 32, respectively, Dietrich further disclosing where if the remote communications node functions as the secondary gateway (Fig. 1, element 180, is receiving message from element 135 or 210, then it will be the secondary gateway via element 170), then the remote communications device functions as the primary gateway (element 133 is primary gateway), and wherein if the remote communications device functions as the secondary gateway (elements 135 or 210 is receiving messages from element 180, then element 133 is secondary gateway), then the remote communications node functions as the primary gateway (element 170 is primary gateway). Inherently, the minimum and best mode implementation of this communication scheme is utilized by Dietrich to minimize size, weight, power, etc.

Art Unit: 2182

9. As per claims 7, 16, 27 and 36, Dietrich combined with CAN-Bluetooth discloses claims 1, 12, 21 and 32, respectively, Dietrich further discloses dynamically configuring comprises allocating the primary gateway and the secondary gateway between the remote communications node and the remote communications device based on a user-programmable function (Fig. 3, all the functions used in communication are function calls coded by the user/designer).

10. As per claims 8, 17 and 28, Dietrich combined with CAN-Bluetooth discloses claims 1, 12 and 21, respectively, wherein Dietrich further discloses the services are distributed services (services can be obtained across any one of the CAN nodes in Fig. 1).

11. As per claims 9, 18 and 29, Dietrich combined with CAN-Bluetooth disclose claims 1, 12 and 21, respectively, Dietrich further disclosing the services determining if the communications node is communicating comprises determining if the remote communications node is communicating with a communications node (Fig. 1, element 130 is the remote communications node and the other CAN nodes that it is communicating with are communication nodes).

12. As per claims 10, 11, 19, 20, 30 and 31, Dietrich combined with CAN-Bluetooth discloses claims 1, 12 and 21 wherein Dietrich further discloses determining dynamically configuring comprises negotiating for services between the remote communications node (any of the CAN nodes in Fig. 1) and a plurality of remote communications devices (remote devices are cellphone/basestation in Fig. 1, wherein the remote communications node is chosen as the primary gateway and one of the plurality of remote communications devices is chosen as the secondary gateway or vice versa (per claim 32, Dietrich discloses establishing communications requires negotiation using identifiers and comparison scheme for communications between the CAN nodes and a gateway device, Column 11, lines 1-27)).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following non-patent literature are cited to further show the state of the art with respect to wireless CANs:

The Potential of Bluetooth in Automotive Applications by Wunderlich and Schwab.

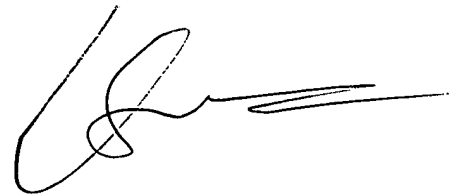
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 8:30am - 5:30pm.

Art Unit: 2182

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASC
10/14/2005



KIM HUYNH
PRIMARY EXAMINER

10/15/05